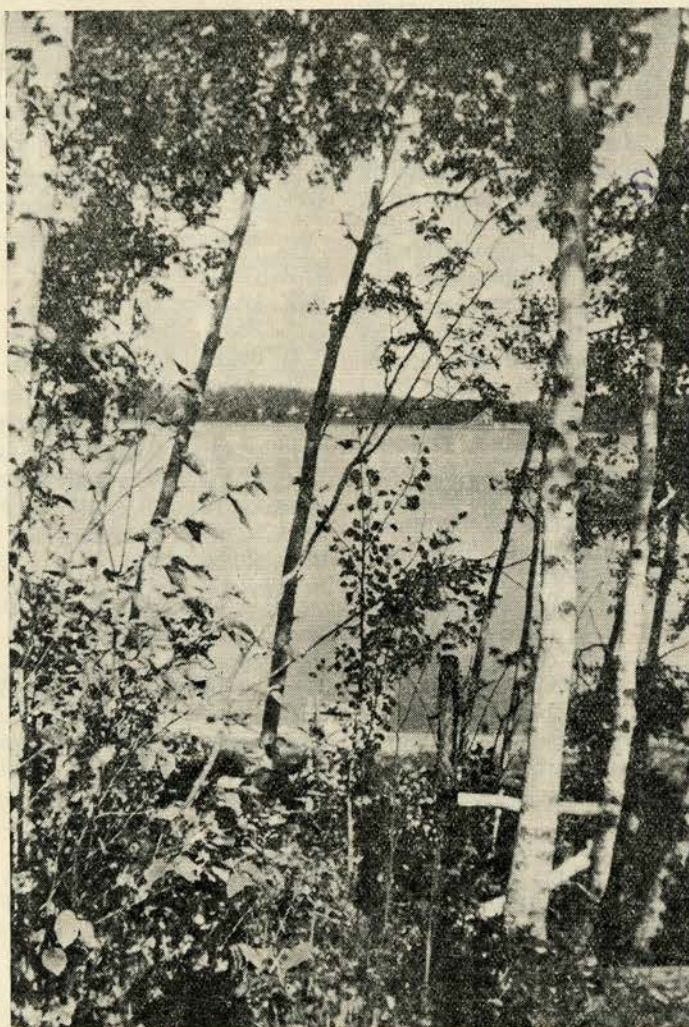


NORTH AND SOUTH DAKOTA HORTICULTURE

OCTOBER, 1939



Beautiful Lake Metigoshe, in the Turle Mountains
a few miles S. W. of the International
Peace Garden.

South Dakota State
College Library

The winter meeting of the S. D. State Horticultural society will be held at Sioux Falls, S. D.,
November 15th and 16th. You will enjoy this meeting.

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THE SWAMP SPARROW

by
By O. A. Stevens



O. A. Stevens

This species completes the small group which includes Lincoln's sparrow and the Song sparrow with its numerous races. It resembles Lincoln's sparrow and is even less well known, for it is shy and inconspicuous, keeping well under cover of the tall marsh grasses as a rule. The top of the heads of the young birds have stripes of dark gray alternating with those with a mixture of black and reddish brown as in the Lincoln's and Song sparrow.

The adult Swamp sparrow has a red cap with some black in front. The side of the head is gray with a white stripe above the eye. The wings are quite bright reddish brown on the back while the body below is tinged with a sort of olive-gray but has no streaks. The legs and toes seem especially long and slender which must be very handy in running about over mud and long-leaved grasses.

My acquaintance with this bird is rather limited. Sometimes during migration I see them especially along some grass-grown ditch, though they come into the garden during their main flight. If one is trapped it usually darts about when approached, uttering a series of squeaks which seem characteristic of this bird. They are widely distributed, however, and are reported to nest all the way from central Alberta to Newfoundland, New Jersey and Nebraska. Presumably they nest in the Dakotas but definite records seem lacking because of their restriction to marshy places and their seclusive habits. Dr. T. S. Roberts states that in Minnesota it is "a common summer resident throughout the state; somewhat less frequent on the prairies, especially in the Red River Valley."

In regards to its habits, Dr. Roberts writes: "It is more secretive than the Song sparrow and is loath to leave the concealment of its retreats. It climbs up and down the coarse stems of the reeds and bushy shoots in a nimble, mouse-like manner, and when alarmed, descends into the dense marsh grass, runs rapidly away." Our knowledge of the bird dates essentially from Alexander Wilson who gave it the name of Swamp Sparrow, though it was later identified with a scientific name used by a British writer a few years earlier. Wilson wrote that the birds were common in winter in the cypress swamps and grassy flats bordering the rivers and rice plantations in the Southern States. He was also

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TABLE OF CONTENTS

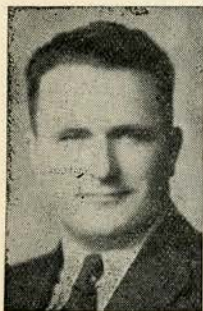
	Page
The Swamp Sparrow, O. A. Stevens.....	110
Newsletters, H. A. Graves.....	111
Trees of the Dakotas, G. F. Will.....	112
Nature Department, H. L. Hopkins.....	113
President's Corner, H. E. Beebe.....	114
Manitoba News Letter, W. R. Leslie.....	115
Secretary's Corner, W. A. Simmons.....	116
Autumn Colors, R. E. Smith.....	117
October, W. E. H. Porter.....	118
Book Review, Mrs. F. Briley.....	119
Fruit and Vegetable Notes, F. X. Wallner.....	119
Autumn Landscape, C. B. Walron.....	120

familiar with their nests which he said were built "on the ground, sometimes in a tussock of rank grass surrounded by water." The eggs seem to be similar to those of several other species of sparrows. They are described as heavily spotted with dark brown, about three-fourths of an inch long.

A. H. Howell states that the Swamp sparrow is an abundant migrant and winter resident in
(Continued on page 113)

NEWSLANTS

by
Harry A. Graves



H. A. Graves

Louis Lentz, who grew one of our demonstration garden plots this year, claims that a few nasturtium plants in each cucumber hill will keep the beetles away. I won't take any responsibility for any claims of this kind since I don't pretend to be an entomologist, but I am forced to admit that his cukes were free from beetle damage while nearby cukes were severely eaten in spite of frequent dustings.

This column has been especially valuable to me in the many friends I have learned to know by way of correspondence. Because of comments expressed herein from time to time regarding horticultural items of special interest to them, they have written me many interesting comments.

Most recent of these correspondents is Dr. E. W. Montgomery of Winnipeg, Manitoba, whose letter was received right on the heels of the September issue of North and South Dakota Horticulture. Dr. Montgomery's letter had to do with the report on hackberry. I quote from his letter:

"I note in your last letter in the September issue that the Hackberry has been found growing in McHenry county and the Turtle Mountains. Hackberry trees have been found growing on the south shore of Lake Manitoba about 50 miles northwest of Winnipeg. I do not know of any being found in any other part of the province. I once imported some Hackberry trees from Minnesota, but these winter-killed year after year, while several trees which I transplanted from the Lake Manitoba grove are quite hardy and have been growing vigorously in my garden for fifteen years. The Ohio Buckeye also grows well here and my trees have a very large crop of nuts this year."

This just bears out Frank Skinner's statement made at the 1938 North Dakota meetings that there is a lot of work to be done in selecting hardy geographical forms of trees.

New arrivals at our desk have been "The Rock Garden" by Henry T. Skinner, Bulletin No. 403; and "Creeping, Climbing, Sprawling Plants," Rural School Leaflet No. 4—both obtainable from the Office of Publications, College of Agriculture, Ithaca, New York.

With a fresh reason to be mad with Kochia, alias Burning Bush, alias Summer Cypress, alias just plain pest, I cannot pass up the opportunity to take another slap at this plant that so readily

becomes a weed. Having recently purchased a small piece of property, I find it to be overrun with this plant, and, although we are pulling and destroying it, there is no telling how many million seeds are still in the soil to germinate next spring. My suggestion would be: if you have it, get rid of it as soon as possible; if you haven't grown it, don't start.

Harold Schulz, NDAC horticultural graduate, class of 1938, is now landscape architect at the International Peace Gardens.

A. J. Dexter, agricultural development agent for the Northern Pacific railway, has just been in the office this morning and painted an interesting word picture of vegetable growing as practiced in the Matanuska Valley of Alaska. While the humidity of the air is so high that hay has to be cured off the ground on poles, the average annual rainfall is only about 15 inches.

Blood and thunder aplenty and a heap of homely living packed into 424 pages can best describe the book, "Old Jules." Written by his daughter, Marie, this biography of a Swiss immigrant who became a pioneer horticulturist in the dry land of Nebraska, contains not a dull page between its two covers. Recommended by such horticulturists as Mr. Simmons, Dr. Hildreth and Mr. Leslie, I found it a book difficult to leave, once begun.

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TREES OF THE DAKOTAS

by
Geo. F. Will



Geo. F. Will

The Weeping Willow is much esteemed all over the country. We have tried a number of Weeping Willows in our own state and so far have failed to find a single one that was not killed back by a hard winter every five or six years. However, this may not be altogether unsatisfactory. As the Weeping Willow gets older it loses some of its grace and beauty and by cutting it back close to the ground every five or six years it keeps a much handsomer ap-

pearance, so that even if it does kill back it undoubtedly has a place among our ornamental trees.

The various Apples and Crab Apple trees which are hardy in our state present an addition to the available number of ornamentals which has been given too little consideration. There are various shapes and types among the many hardy Apples and Crabs and some of them are of outstanding beauty. Among them should be mentioned Prof. Hansen's red-flowered Crab, the Hopa, and the very handsome Dolgo, which is beautiful in flower, in fruit and in general appearance. The Red River Crab also is an unusually useful ornamental. The Plums are mostly too small to be classed as regular trees. They have their place, however, as ornamentals and should be used as large shrubs in landscape planting. Perhaps the most generally decorative is the Native Wild Plum, followed by some of the Plum-Sand Cherry Hybrids.

There is a native Alder in the northeastern part of the state but I have never seen it used in ornamental plantings and suspect that it is too scrubby and too high in its moisture requirement to be of much value for general planting. There is also the Hop Tree or Hop Hornbean, which is found sparingly in the Turtle Mountains and makes a rather handsome tree as I have seen it further south. I have never seen it propagated or used in the north.

The Russian Olive, famed as a hedge plant primarily, can be trimmed into quite a handsome small tree, getting up to a height of as much as 25 or 30 feet, and adding a distinctive quality in its silvery foliage to the mixed planting.

For the last of these broad leaved deciduous trees I have left the Siberian or Chinese Elm, which has been a matter of discussion for some years now over most of the Great Plains. The

general verdict at present as announced by the government authorities seems to be that this Elm has its chief value in windbreak and shelterbelt planting and that the center of its adaptation is the central and southern Great Plains from southern Montana and southwestern North Dakota to Texas. It is an established fact that the tree does winter kill every now and then over much of North Dakota and even more frequently in southern Saskatchewan and Manitoba. Further north than that it can not be grown. It has been planted in many places as a lawn and boulevard tree. Observation seems to show, however, that it is too brittle and easily damaged by wind, ice, etc., to rank amongst the trees which should be recommended for that purpose, especially since over most of the state every three or four years there is quite a killing back of the younger growth, which renders it unsightly, and makes a lot of extra work to trim it off. In farm planting for shelterbelt and woodlot this disadvantage is not serious. Even if it kills back badly, as it does sometimes, it may be cut off close to the ground and will spring up rapidly and produce a new tall bushy growth in an almost unbelievably short time. Another use which has only recently been recognized is for hedges. It is reported that that is its primary use in China, whence it comes. It stands trimming well, grows rapidly and yet will hold at almost any height desired and makes a very thick impenetrable hedge. It is undoubtedly the most drouth resistant tree that we have and as such is outstanding for farm planting and exposed hills. Care should be taken not to plant it in poorly drained soil, as that is the one thing that it will not stand.

The Locust has been frequently tried in North Dakota and in general has proved entirely too tender. However, there are strong hopes that a hardy strain of this beautiful tree will eventually place it among our most useful ornamentals. Some years ago we were given a quarter pound of Locust seed from central South Dakota. This was grown on trees that originated in Russia in rather a severe climate. We planted the seed with considerable doubt as to the use of doing so. However, we got a number of nice seedlings and today have a hundred or more of these which are 8 to 10 feet high. In their earlier years they killed back somewhat every year but during the past year or two have shown no killing back at all. Among them we may find one that will stand any of our winters. Recently my attention was called to one or two Locust trees planted near the home of one of our old time residents. These were some 18 feet high, were alive to the tip and were literally covered with huge clusters of white fragrant pea-like blossoms, which makes the tree such an outstandingly ornamental species.

(Continued in November issue)



NATURE DEPARTMENT

by
H. L. Hopkins

Another Snake Story



H. L. Hopkins

On another occasion, brother Cyril and the writer, were fishing the same water. It was following a rather heavy rain and the water was quite muddy and higher than normal. I started to wade across at a rocky, rapid spot in the stream. With overalls rolled well up on my legs and in swift, knee-deep water, I started very slowly and gingerly, to pick my way across the slippery footings. When about half way over about a foot of the body of a big spotted, black and white water snake, kinked up to the surface of the murky water, about ten inches in front of me. It was fully two and one-half inches in diameter and was apparently swimming up stream. I decided, pronto, that I had lost nothing on the other side of that river—that I didn't want to go there anyway, and I negotiated the distance back to the bank from which I had started in a shade less than nothing flat. As a thrill there was very little more to be desired. Cyril smiled audibly and I very soon joined him and we made a laughing duet of it.

A Destructive Incident

When a lad about 10 years of age I spent an afternoon on a spring brook fishing. Towards evening, with a nice string of fish, I made a short cut across the field of a neighbor, on which he was plowing. He was a big, coarse, bull-voiced chap, a bachelor. As I was passing within about thirty feet of him he suddenly stopped his team, began swearing at and foully cursing me, like an old Mississippi pilot, and gave me a long chase, while he cracked his big blacksnake whip alarmingly close, without actually hitting me. It was probably meant for a rather coarse joke, on his part, as I had never given him any reason for this indignity. I fear I did not fully appreciate his levity. The next afternoon, Sunday, I quietly visited his big five-horse plow outfit, which he had left in the field and, using his wrenches and other tools, I removed every nut, bolt, clevis and

tool, that was removable, carried them down to the brow of a steep, high hill, covered with many seasons' growth of dead grass, sundry hazel brush, wild plum, chokecherry and scrub oak, and threw the stuff, helter skelter, all over the hillside. When he went to his field Monday morning he loaded the plow outfit into his wagon and took it to town where he outfitted again with the missing stuff. It is the only time during my life that I ever deliberately, and with malice aforethought, destroyed property. My present mature judgment, of course, condemns this act of vandalism; but considering my age, immaturity, and the boy psychology of the incident, I apprehend that the average boy, of that age, would react much the same today.

In one of the early years of the current century, with my family, I was taking an outing in summer on the east shore of Lake Kampeska. One very windy afternoon I decided to try for walleyed pike. My daughter Gail, a sturdy, third grown youngster, good sailor and splendid swimmer, decided to share the luck with me. Ours was the only boat that ventured out. We bucked the big rollers, headon, out about one hundred rods, to the right depth of water, and cast anchor. Owing to the high gale our anchor dragged and we had to pull out several times in the three or four hours of fishing. We hooked nothing but walleyes and we pulled in with sixteen of them that averaged about four pounds each. Many other cottagers along the shore line came down to see our catch and all pronounced it the finest string of pike that they had ever seen taken from the lake.

THE SWAMP SPARROW

(Continued from page 110)

northern and central Florida, but he rates Lincoln's sparrow as rare. Major Coues wrote of their spring migration at Washington, D. C.: "I used to look for it in the undergrowth fringing tiny streams flowing through open woods, and rarely failed to find it, if I looked close enough, in the very heart of such recesses, the skirts of which were full of white-throated sparrows and other more conspicuous species." Thus do all the writers agree on the habits of the bird and the aptness of Wilson's name, Swamp Sparrow, for it seems to have found itself a niche somewhat apart from the rest of its kin.

You can't travel in Europe without thinking of soil fertility. Every home has a cement enclosure for refuse. This is collected and put back into the land. In London, the sweepings from the houses are collected, ground and used for fertilizer. Not even the dust is wasted.—Mrs. Sayre in *Prairie Farmer*.

PRESIDENT'S CORNER

by

H. E. Beebe

October Prepares Horticulturists for November Meeting

We all meet at Sioux Falls November 15 and 16.

The directors present at the North Dakota meeting placed Stalwart Wallner and Secretary Simmons in charge of arrangements which means that we will have an exceptionally good time.



H. E. Beebe

Sioux Falls is the home of many nurseries and the more favorable climate has produced a large number of fine gardens in that city, combined with the large interest, fostered by the

ardent horticulturists of Sioux Falls.

We are all looking forward to a wonderful time at Sioux Falls on November 15 and 16.

World's Fair Shows President "Gardens on Parade"

The New York World's Fair contained quite a few ornamental flower beds besides those in "Gardens On Parade." These were arranged along the main roads leading out from the perisphere and made the walks between the buildings rather pleasant.

In general, all of the exhibitors seemed to make a point in having grassy plots near the entrance. "The Mikado in Swing" contained a good many colored flowers, but the high spot for horticulturists was "Gardens on Parade."

The entrance was through an ornamental iron gate about 20 feet high with flower designs and a rock garden on the outside as a bid to what was inside the iron fence.

Probably 30 nurseries had landscapes in varying moods, although they seemed to run to the formal and symmetrical.

By formal, I do not mean stiff, but there seemed to be a reason for each shrub being where it was and I liked it. Going through Iowa, many of the farm homes had the lawn mowed and trees trimmed and what made the most difference was the clipping of the grass and all growth on the ground off smooth right out to the highway.

All colors and varieties of flowers were in the beds including our wild sunflower with a long name on the label, used as a background for short-er flowers.

Several beds were "blooming throughout the year," which sounds interesting and a paper on that at Sioux Falls which would apply to the Dakotas might be worthwhile. Back of the cottage was a piece of native woods, ferns and flowers and a small bridge over a narrow brook—very

refreshing under the trees after the warm tramp along the Fair street.

When the annual reports arrived, the article "Prairie Wild Flowers" by Mrs. Dwight Campbell, on page 22, brought back the sight of this woodland glade (Page, "The Three Trees") and if you desire extra copies for budding horticulturists, Secretary Simmons will be glad to furnish them. Some good ideas by Mrs. Mater of Ipswich in this also for amateur gardens on "Raising Flowers in Spite of Drouth." But this is getting far from the gardens. In Long Island maybe I saw too much and as time goes on, the impression will be clearer so "see our next issue for later bulletins."

Trip Home Full of Flowers

From the World's Fair we took Beatrice to Lasell college in Auburndale, spending a pleasant hour at the home of Neal Herrick, former Ipswichian, in that city. Neal has what any Dakotan would give a quarter section for, the Charles River in his back yard, with wild ducks calmly walking out on the lawn.

The next day by the statue at Gloucester, which many of the readers of this paper saw in the last scene in "Captain Courageous" and through Ipswich (Mass.) to my cousins, the Lovejoy's summer home near Barnsted, New Hampshire.

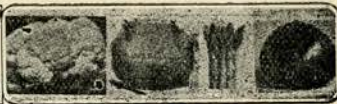
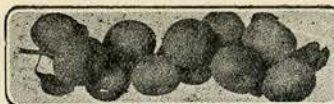
The old barnlike-looking house, formerly the home of an artist who entertained Kenneth Roberts while he wrote Northwest Passage, is called "The Junipers" from the many clumps growing around the place in the foothills of the White Mountains.

Much could be said of the beauty of the gently rolling and green country across New Hampshire and Vermont but I must pass on to you a small part of the thrill of seeing acres of gladiolas of all colors at Ovid, Michigan.

The Vaughn Seed Company have 240 acres in fields of five to twenty acres scattered within six miles of Ovid and each spring they loan to any citizen all the bulbs desired. My aunt Lizzie Jackson had several hundred in a bed in the lawn and cousin Wilma Bates had planted about a thousand in concentric circles on a vacant lot bought by her husband. In the center were the tallest castor beans I've ever seen in or out of captivity, about twelve feet high and branching like a palm tree.

I wish we could have stayed for the following three day flower festival and homecoming but South Dakota was calling and I wanted to enjoy the warm evenings and the ocean, like Frances Holstrom writes in "Oregon October."

"This spells October; this, the calm abating Of sap and pulse in an enchantment deep; This, and the calm hush, and this, the peaceful waiting,
The earth falls down, but falls not yet asleep."



MANITOBA NEWS LETTER

by
W. R. Leslie



W. R. Leslie

accompanied by their leader from the Capitol, St. Paul.

Two and one-half inches of rain had drenched the fields recently. Lawns had greened up and a large proportion of the grasshopper hordes had apparently moved on to greener pastures. These happenings made comparatively pleasing the conditions at the station, and these good and cooperative neighbors found the various plantations of interest.

The two hundred acres of horticultural land of the Morden station is one of the largest garden patches on the Great Plains area of North America. Attention is paid not only to fruits, vegetables and flowers but also to several specialized forms of the garden craft, such as pergola dressing, roses, rock garden, hedge display, winter garden effects, and an arboretum. It is gratifying to record the very considerable and growing attention these plantings and the experimental projects are receiving from specialists in the nearby states.

Among the Dakotans were a number of commercial nurserymen, college professors, truck gardeners, private home-makers, and their greatly esteemed Secretary, who has served not only South Dakota but the wide prairies on all sides for many fruitful years. Mr. Simmons edits that helpful and meaty monthly publication, Dakota Horticulture.

The Station staff profited much from the two visits. Some of those from South Dakota stayed two days. Discussions emphasized that the problems in shelterbelts, water conservation, fruit improvement, flower succession, plant propagation and general gardening are to large extent comparable in northern Minnesota, the two Dakotas, and southern Manitoba. This prairie territory is a common creation and it appears splendid wisdom that gardeners in the various units enjoy thinking and working together.

One of the factors in successful gardening is the choice of season for transplanting. Some plants may be set out in early spring or in autumn with comparable satisfaction. Some demand spring moving. Others do best when their setting is changed only in late summer.

In general, spring blooming plants, such as tulips, anemones and irises are best moved late in the season in contrast with late blooming perennials, such as Heleniums and New England asters, which react best to early spring planting.

Iris are usually planted in late July and August. Peonies become well established when set the first half of September. They may be placed in their new plot any time up to freeze-up but benefit from having the longer period for root formation. Lilies are mostly added to the plantation in September.

Mid-August is a favorable transplanting season for spruce and some other conifers. Experience at the Morden Station has been happy in that respect and no loss is recorded to date when the chore is done under moist soil conditions. Growth the following season tends to be much more lusty than that on sister plants not moved until next April.

The first week of September is favored for setting out new plantations of raspberries, currants, and gooseberries. The plants are stripped of their leaves as dug but not cut back until next April. Cut surfaces do not heal readily in autumn as sap flow is small. The open wounds tend to dry out in the winds and from winter freezing, causing considerable length of dead stubs next spring.

Strawberry plants may be set out in August but late April is considered the optimum period in southern Manitoba.

Rhubarb, tulips, and scilla are placed in their new beds in autumn. Early September is preferable to later dates.

Ornamental and fruit trees and shrubs are often set out in September with good results but April is a safer time.

It is a good plan to purchase nursery stock for September and early October delivery to be heeled in carefully in well watered trenches. This policy is helpful to the nurseryman and ensures the gardener of getting select stock while his selection of varieties are in full supply.

Emphasis is strongly placed on the need of having the soil well charged with moisture. Autumn planting in dry soil is nearly certain to be painfully disappointing.

The chief insect enemy of the prairie rose garden is the rose curculio. It is about a quarter inch long, bright red above and black beneath. This beetle punctures the young buds and often eats holes in them. Eggs are deposited in the

(Continued on page 116)

SECRETARY'S CORNER

by
W. A. Simmons



W. A. Simmons

Some time ago a card reached us from Mr. Sam H. Bober, mailed from Copenhagen. This week another card came, this time from Moscow. The message written on it was as follows: "At the Agri. Exposition, Moscow, sundials, made of flowers lead to the pavilion of Horticulture. The dial is made in the form of a bed of red geraniums and pale blue lobelia. From the center of the bed rises the sculptured figure of a woman, holding a staff in her hand. The shadow cast by the staff on the dial indicates the time of the day." On the other side of the card he wrote: "One hundred sixty varieties of dahlias and hundreds of other flowers, exhibited at a collective farm that specializes vegetables and flowers, near city." Our friend and director seems to be doing a lot of traveling this summer and should have something interesting to tell us when he returns. A very pretty and deserving flower, *Gilia rubra*, seems to have been much overlooked. Several years ago Mr. Geo. W. Gurney gave a quantity of seed, which I scattered around and promptly forgot. This year five robust plants came up with pretty lacy foliage and proceeded to rise heavenward, finally attaining a height of nearly six feet. The plants were beautiful at all stages of growth, slim little columns of lacy foliage, always the same diameter, about three inches. In July the topmost two feet of the plants broke out with bright scarlet blossoms that lasted a long time and made a very bright spot in the garden. Now a large quantity of seed is ripening, which I shall be glad to share with my friends; if you want some, drop me a card. It is either a biennial or a perennial and attains a height of only a few inches the first year, but it is well worth waiting for.

Under date of September 6th, Dr. Yeager writes from his new home at Durham, N. H., in part as follows: "We arrived here at Durham nearly a week ago but did not get settled until today due to delay in receiving our household goods. I find problems here at New Hampshire not too different from what they are in the Dakotas, short season, early varieties important. I hope that some of the breeding projects carried on here may result in material that may be valuable to you people in the Dakotas. I wish you all the best. I have no doubt but that with the changes at the N. D. Agricultural College things will improve gradually, in that neighborhood. I

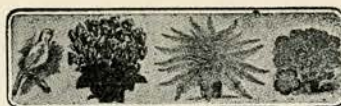
am glad to hear that the magazine will be forwarded and when I get around to it, I will write you, as I promised, for publication in it." A letter from the Secretary, Dr. J. C. Snyder, announces that the 35th annual meeting of the Washington State Horticultural Association will be held at Wenatchee, Wash., December 4, 5 and 6. One of the pleasurable features of our recent Morden trip was our stay in Grand Forks, made so by the very talented park superintendent, Mrs. M. B. Kannowski. At her insistence, we breakfasted at her house, after which she took the wheel of Mr. Dybvig's car and conducted us on a tour of the many beautiful parks she has done so much to beautify. We think Grand Forks is a very lucky city, first in having such an artistic park superintendent, and secondly in being able to include in their parks, areas along the river that still have the fine old trees nature and several hundred years of growth, put there. Mrs. Kannowski thinks it is probable that she will be able to attend our annual meeting in November, which is very good news, indeed. Down in Virginia, according to Editor Campfield's splendid magazine, growers that also have livestock, have discovered a new use for the troublesome cull apples, by mixing them in the proportion of one-third with their corn and grass silage and report that it makes a feed that makes the stock grin from ear to ear. He warns: "In beginning the feeding of fresh apples to livestock, particularly milk cows, start very gradually. Stock will eat apples very readily, but don't begin by feeding them all they will eat." Hoosier Horticulture gives the commercial apple crop, as of August 1, at 102 million bushels. This compares with the 10-year average of 92 million bushels and last year's crop of 82 million bushels. This month will see a killing frost, like death, never a welcome visitor. The trees will be denuded of their leaves and many of the leaves will be raked up and burned by grown up boys and girls that just can't outgrow their delight at seeing a bonfire. Intelligent gardeners don't do such things; they save the leaves for the compost heap, to provide humus for future gardens. Nuff said. Children, don't waste this humus.

MANITOBA NEWS LETTER

(Continued from page 115)

hips or fruits. The larvae develop until late August or early September, when they drop to the ground. Next spring they have again reached the beetle stage and attack and reinfest the roses. The best precaution is to harvest and destroy all rose hips.

Books are but waste paper unless we spend in action the wisdom we get in thought.—Bulwer.



AUTUMN COLORS

by

Ralph W. Smith, Associate Agronomist

To anyone who is interested in the changing pageant of the seasons, the special coloration of autumn foliage is a source of perennial interest and enjoyment. This added attraction of changing colors is not confined to trees but shrubs, prairie grasses, and even weeds acquire especially attractive colors at this season.

Autumn colors are said to be more attractive when there are sunny days and cold nights. The degree of soil moisture present also affects the autumn color of leaves.

The different varieties of trees and other plants have their characteristic autumn colors and when growing in their wild state these seem to be in harmonious combinations. The horticulturist should profit by studying these colors as an aid to the selection and arrangement of varieties for ornamental planting.

The writer was privileged to take a vacation trip in late September, going from Dickinson, N. D., to Itasca Park, Minn., and returning via the International Peace Garden and Lake Metigoshe in the Turtle Mountains. The entire trip was more or less colorful so that only a few items of special interest can be mentioned.

In the fringe of trees that marked the courses of the rivers crossed, such as the Heart, Missouri, James, Cheyenne, and Red River, the ash, boxelder, and elm leaves were just beginning to turn yellow and brown, and cottonwood leaves were beginning to glisten with shimmering gold in the autumn sunlight. Thickets of chokecherry shone with foliage of salmon-pink and lavender, Juneberry bushes were yellow and green, and wild plum leaves were crimson and purple. Scarlet fruits glistened on wild rose and hawthorne bushes among yellow and red foliage.

After reaching the Lake region of Minnesota there was a greater variety of trees and shrubs to add color to the landscape and roadside. Sumacs with crimson and purple leaves and berries brightened the roadside on the hills and dogwoods repeated the same colors in the valleys. Hazelnut bushes were coppery-brown by the roadside and burr oaks were turning from green to orange-brown. In the red oak and hard maple the green was intermingled with flaming colors of crimson and orange-red, respectively.

Perhaps the most beautiful part of the trip was along the winding roads through Itasca Park. Each turn of the road brought new vistas of beauty as it wound around hills and lakes, through forests of pine, spruce, fir, aspen and birch, with numerous species known only to the botanist. The whitish trunks of birch and aspen were in bright contrast with dark trunks of pine

and spruce, while their leaves of dazzling yellow glistened against a background of dark evergreen foliage. At times the road was near the lake where, between dark tree trunks, the bright blue water sparkled in the sunshine or where, in quiet bays, the still water reflected a colorful forest beyond, unless the surface was stirred by waterfowl and muskrats that swam unmolested in this nature refuge.

One turn of the road brings the traveler alongside a grove of tall, stately trees called "Preacher's Grove," reminding one of the poet who said "The groves were God's first temples" and of that other poet who said, "Only God can make a tree."

One point of universal interest is where the infant Mississippi leaves Itasca Lake as a small stream 12 to 15 feet wide. For a short distance it flows northward through a narrow meadow, overgrown with shrubs and plants now bright with autumn tints, and with colorful forests on each side. Continuing in this direction for a short distance the stream finally gets its bearings and heads southward toward the distant Gulf.

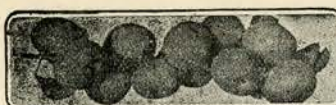
Leaving the autumn-tinted woods of Minnesota, and passing on U. S. Highway No. 2 through the potato and beet fields of the Red River Valley, and the stock and grain farms of North Dakota, we turned northward at Rugby. At Dunseith we found ourselves approaching the Turtle Mountains on the newly-surfaced highway No. 3. This scenic plateau with its rounded hills partly covered with yellow and brown forests extended far to the right and to the left.

In the trees previously seen many of the leaves were still green. Here autumn was farther advanced and most of the leaves had fall colors. As the road climbed the foothills, yellow and brown bur oaks were much in evidence. It passed through valleys containing meadows and lakes bordered with brown sedges and cattails, that sheltered numerous waterfowl and muskrats.

The road continued northward over wooded hills, finally to enter the International Peace Garden where forests of aspen, oak, birch and numerous smaller shrubs were gay with autumn colors. The whitish trunks of birch and aspen, the brilliant yellow foliage of the trees, and the red and crimson foliage of numerous berry bushes, as seen in the bright sunshine of an Indian summer day, combined to make an atmosphere of peace that was quite in harmony with the spirit of the Peace Garden.

Good roads are being completed in this park and picnic shelters and many other conveniences for tourists are being erected.

Some day a good highway will connect the Peace Garden with Lake Metigoshe, which also is in the Turtle Mountains 20 miles to the westward.

**OCTOBER**

by
W. E. H. Porter



W. E. H. Porter

Aug. 17th. As August advances and the nights lengthen, over shade temperature averaging in the 70's and 80's instead of between 90 and 100 of July; morning cloudiness and dewy vegetation make summer heat more endurable, a release compensated however by an increasing torment of flies. Tho' midsummer brilliance wanes, other blooms reach perfection or occupy the spotlight for the first time. I have in mind Borsch's supremely lovely baby breath Rosy Veil, *Gypsophila rosenschlier*; you have only to see this to make sure of getting it. Annuals *Gladanthus arabicus*, *Convolvulus tricolor*, *Centaurea morchata*, the imperial purple of *Delphinium orientale*, the Tyrian rose of *linum roseum* (I wish this was a perennial, like my other flaxes), the new red cosmos and of course zinnias, Will's Ada Black and Pymid white phlox, *Coreopsis tripteris* growing ever taller and slimmer, our new semi double sunflower orange ray floret with disk of orange, green tinted, all doing their duty. Our first picking of Hansen's new Russian black currant, bushes of two years' standing, larger and sweeter than our wild black with excellent bouquet, the birds have found out all this, as also the merits of Oka cherries. Golden elder now tipped with flat white fragrant blooms and as usual a sparse showing of late bloom on our white rockets. I also saw a large green humming bird zooming from flower to flower, apparently a migrant. Aug. 27th. Notwithstanding European crisis caused by dictatorial arrogance and lunacy, gardens continue to fulfill their function of beauty and utility. Following a week of cooler weather with sporadic showers, we are temporarily back again to 91 in the shade. Like Tennyson's brook the pale turkey red tubes of turtle head (*chelone barbata coccinea*) on tall spikes with enlarging basal rich green clumps, seemingly go on forever. A Chinese bellwort (*Codonopsis ovata*) pale aster violet, with peacock blue veins, of semi-climbing habit, attracts so much attention and has fortunately proved fully winter hardy, that for the benefit of our members I mention that bulbs for October planting can be obtained from Rex D. Pearce, Merchantville, N. J. Golden Glow brightens the deep border along with the common annual sunflower, a semi-dwarf with heads 7 inches in diameter, and its very beautiful variety, somewhat taller, a darker shade with zonal banding

of mahogany and crimson, named Excelsior. Also holding the spot light are the cream tassels of Chinese plume poppy, *Bocconia cordata*, pink *Buddleia* yellow bells showing black anthers on expansion of *Gassia marilandica*, a root-hardy shrub, only with me, and brilliant sheets of snapdragons filling in the picture. Aug. 30th. Continued dry heat. Following a period of summer dormancy healthy shoots of May Queen poppy visible, also grape hyacinth, including *Hyacinthus azureus*, a true grape hyacinth also although more resembling a hyacinth. Spring flowering bulbs whose green foliage persists during winter. A mauve carpet of our hardy petunia *Ruellia ciliosa* never misses its A. M. display tho the flowers are but a day. One of our pink phlox *sublata* has some fall bloom and a revival of growth and color apparent in the Swiss pansy bed. Sept. 2nd. Burnett's new *Delphinium* "Pink Sensation" has at last arrived. As it is said to be a true variety a description is in order, foliage green with yellow marbling. Is this a case of correlated variation? Flower spike full with many laterals, color carmine, bee tipped with imperial purple, being I believe, the one and only *Delphinium* of this color and, as our conditions seem to be "par excellence" for all delphiniums, it is a real acquisition. Following a few weeks rest *Daphne cneorum* is out again in color and fragrance and, tho later than last year the fringed blue chalices of *Gentiana septemfida*. A beautiful annual ground cover is now at its best viz Rex Pearce's trailing hollyhock (*Ribiscus Trionum*) described correctly as ivory hued cups, violet patched with golden anthers; no less attractive are the ensuing white semi-transparent globes, enclosing a central core of five cylinders tightly packed with black seeds which finally turn brown and expands to a flat plate when the seeds scatter. Seedlings (seed sown just a year ago) of Asiatic spurless *Delphinium cinereum* coming into bloom (a French blue that never fades) just a few inches high; a two-year plant reaches height of 2½ feet. Sept. 4th. Cool, A. M. temp. 42, one reminder that summer has passed and another is the arrival of fall planting lists. Coincident with release from intense heat, pink and white rose like flowers of *Tunica saxifraga* appear in profusion above its grass-like foliage. This plant is a member of the pink family and when in bloom has the airy grace of a baby breath. The same condition induces free bloom of cyclamen purple perennial *convolvulus althaeifolius*, a rapid climber in late summer and, our golden feather border which has featured as a foliage plant all summer is now covered with countless daisies.

Whole apple is still one of the best forms of laxative in the world, and a sovereign cure for constipation.—Dr. Logan Glendening.



BOOK REVIEW

by
Mrs. F. Briley

Fruit Crops, by T. J. Talbert, Professor of Horticulture in the University of Missouri, and A. E. Murneek, Associate Professor of Horticulture in the University of Missouri. Octavo 345 pages, illustrated with 112 engravings. Price \$3.75, published 1939 by Lea and Febiger, Philadelphia. Fruit Crops is not just another book about the principles and practices of orchard and small fruit culture but it gives the viewpoint of practical fruit growers from whom the authors have collected and incorporated in the book, valuable information upon almost every phase of fruit growing. Fruit Crops is a treatise on fruit growing as a business undertaking and the methods advanced are a far cry from the way our fathers propagated the fruit trees in the middle west, when many of them were planted in a hole made with a post auger. The results in those busy times, naturally were the survival of the fittest. Special chapters deal with pollination and fruit thinning, irrigation, pruning, insects and diseases, grapes, apples, stone fruits, nut culture, etc. book has been used successfully as a text book in colleges of agriculture.

Chemical Gardening for the Amateur, by Charles H. Connors and Victor A. Tiedjens, both of New Jersey Agricultural Experiment Station. Published by Wm. H. Wise & Co., 50 West 47th St., New York. Price \$1.95. Chemical gardening has been high sounding and has seemed rather highbrow to the amateur, something to be afraid of, but when a book like this one starts out by telling you to stop on your way home at the corner drug store and buy a package of plain white blotters, epsom salts, washing ammonia, baking powder and saltpeter, you feel that chemical gardening has nothing to be snooty about. You have known about all of these materials all your life. With such an interesting beginning the book is most intriguing and follows with full directions for making your own equipment from common household articles, and mixing solutions from simple ingredients. No knowledge of chemistry is required. The authors advise chemical gardening as a hobby. "Any hobby which gives us pleasure and is at the same time instructive is sufficient justification unto itself. Any enterprise that takes up our spare time and helps to take our minds off our troubles will lead us along the road to a longer and happier life." It has been said that "he who groweth a plant wisely and well addeth stature to his soul." You will find no better book than this one, for chemical gardening.

God has given us tongues so we can say something pleasant to our fellow men.

FRUIT AND VEGETABLE NOTES

by
F. X. Wallner



F. X. Wallner

As the season comes to a close I will try to give an account of the vegetable production in this section and particularly in my own gardens. While the onion production is 10% larger than last year, there will be a big loss before January 1st, because of diseased bulbs, all over the country caused by weather conditions. Ours are in very bad shape except an early variety that was marketed some time ago and one lot of sweet Spanish that is better than other types we have. Tomatoes also have been very disappointing, especially the first part of the season. In fact all early types were a failure and subject to blight, with very poor quality of fruit. The late types seem to have been better and we may plant more of them next year and if the season changes, we may be sorry and wish we had stuck to the early varieties. The hot late fall weather has played havoc with peppers and most of the fruit drops off or is sun burned. The new cantaloups Imperial and Wisconsin Pride are some of the best we have ever grown and the older types are also doing well this year. We have had the best crop of sweet corn and the longest season in several years. The crop was all of several types of hybrids and were all yellow varieties. Sept. 17th. Today the Nebraska Federation of Women's Clubs will dedicate a memorial forest of 125 acres near where for the last 30 years thousands of acres of sand hills have been planted to pines. No doubt our State Extension Forester, Mr. Frank I. Rockwell, will make a report at our Sioux Falls meeting in November about this tour. It is about 14 years since we have had a meeting of the Society in Sioux Falls and the local horticulturists and the garden club members are looking forward to the best meeting ever. The Iowa potato crop is considerably below that of 1938 but the Minnesota crop is 10% more than last year and the crop is 2% less, for all producing states than that of 1938. There are about 700,000 commercial vegetable gardens in the United States. A few of these heat 2,400 acres under glass, using a million tons of coal. The vegetable gardening ranks first in importance of all plant industries. The task of transporting the vegetables from 7,500,000 acres requires trucks that would encircle the globe twice. One hundred thousand trucks are required to haul the canning tomatoes from the 425,000 acres that are devoted to raising

(Continued on page 120)



AUTUMN LANDSCAPE

by
C. B. Waldron



C. B. Waldron

How does your autumn garden look—drab and cheerless or gay and colorful like a modern grandmother all dressed up for a party?

In these days when dame Nature is taking a last lively fling before the curtain falls she is giving us many suggestions as to what can be done to keep our premises cheerful and attractive until they are turned over to the snowbanks and the spruces.

For this purpose we may make use of a wealth of material including annuals, perennials, shrubs and trees. Of the annuals the petunia, China aster, marigold and cosmos come to mind as being sure late fall bloomers and just the other day we were impressed by colorful beds of moss rose and four-o'clock.

Because of our short seasons and cold winters, our list of fall blooming perennials has been limited. The tall, white *Boltonia asteroides* is now blooming in many Fargo gardens and will keep in good condition until the hard frosts come.

The *B. latisguama* is a handsomer and smaller plant with blue-violet flowers. It has not been tried much at the North and may not be fully hardy.

The last showy aster known as the New England Aster *Michailmas Daisy* is found here and there in flower gardens, but is not grown as extensively as it should be considering the striking color of its abundantly borne flowers.

The New York Aster is common in cultivation and has given rise to many named varieties of various shades and habit of growth. Most of these were developed by European plant breeders, though the species is a native of the United States.

Some nurserymen are now offering a dozen or more of these varieties. A collection of them that we saw recently impressed us as being very beautiful and interesting. And speaking of seeing things, the *Chrysanthemums* that Mr. George Will showed us in his nursery at Bismarck yesterday demonstrated that one never gets old enough not to learn something new in horticulture. The out-door *Chrysanthemums* that we knew in the peach belt where we grew up were wonderful fall flowers, but, of course, too late and tender for the Dakotas. These new *Chrysanthemums* that the Department of Agriculture is trying out in Mr. Will's nursery are a little more than a foot in height, begin blooming in Septem-

ber, the small but profuse blooms being white, rose or yellow, and the plants show no indications of winter killing. Like other late blooming perennials they should be transplanted in the spring. I imagine that some of this stock will be ready for distribution in the spring.

Of the colorful shrubs, the Japanese Barberry doubtless is the most striking. Driving through the resident section of the lake region of Minneapolis one October day, we were led to remark that if this particular shrub were to be eliminated, the life and gaiety of the whole area would go with it.

In the Fargo parks the wild roses furnish the best fall coloring of any of the shrubs growing there, while the hedges of *Cotoneaster* with their rich deep coloring give a striking note to any landscape.

Among the native shrubs, the sumac, so familiar to all of us, is the most brilliant of all while the red dogwood is outstanding, both for its autumn and winter effect.

We drive over into the Minnesota hills every autumn to be impressed anew by the brilliant acres of these shrubs and the gold of the birches and poplars as well as the intense deep red of the scarlet oaks.

The sugar maples grow there, too, on the moist rich soils and when they clothe themselves in red and gold, we have a display of splendor that nothing can equal.

With a little planning, we can make our autumn landscapes so interesting and attractive that we are quite reconciled to the coming of winter.

FRUIT AND VEGETABLE NOTES

(Continued from page 119)

them. Potato digging is under way in Walsh county, N. D., and the yields are ranging from 30 to 125 bushels per acre. Confirming our estimate that the average yields in the valley would be below 100 bushels per acre. This year the governor of Maine comes to Blackfoot, Idaho, to compete against the new governor of Idaho in the potato picking contest. Governors of other states are to be the judges and the contest will take place at 2:15 September 22nd, the contest being broadcasted. Potato growers of Scottsbluff and other towns of that potato district of Nebraska, claim to have the best crop of Bliss Triumphs the state has ever produced. The five states producing cranberries estimate there will be one-third larger crop than last year. Wisconsin will produce 100,000 barrels, Washington 17,000 barrels, Oregon 7,000 barrels, New Jersey 90,000 barrels and Massachusetts 425,000 barrels. Cannors will take about 150,000 barrels.